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AUTHOR Takei, Yoshimitsu: And Others
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ABSTRACT

A study to determine the influence of a student's social class, ethnicity, sex, and residence of origin on his/her psycho-social integration is reported. The research broadened the scope of inquiry by using the concepts of continuities/discontinuities. The concepts consider both individual and situational variables in analyzing the social and psychological consequences of social mobility. For example, the extent to which a student entering a university experiences social isolation depends on the extent to which his new life is not continuous with his high school life. The sample consisted of 136 students from the University of Malaya who answered a self-administered questionnaire. Three indicators of social integration were measured: past participation in organized activities, student interaction with other students and interest in art and literature, and participation in discussion of politics with fellow students. Results indicate that regardless of ethnicity, social class, or residence, being female is negatively associated with most of the selected indicators of social integration and health. Also, Chinese students at the university are less participatory and less likely to discuss politics. Finally, the study suggests that while the overall effect of social integration on health is probably positive, those who reported fewer symptoms of ill health also reported lower frequency in engaging in political discussion. (Author/KC)

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DISCONTINUITY, SOCIAL INTEGRATION AND HEALTH AMONG EDUCATION MAJORS AT THE UNIVERSITY OF MALAYA

By

Yoshimitsu Takei
Beverly Taheri
Glen Kreider

The Pennsylvania State University

SP 012 652

ABSTRACT

Previous studies on the social and psychological costs of upward social mobility have tended to ignore situational factors. It is proposed that utilizing the concepts of "continuities" and "discontinuities" in a tentative manner broadens the researchers' scope of inquiry and permits the accounting for situational variables. Data gathered from educational majors at the University of Malaya are analyzed in order to illustrate the usefulness of this approach.

DISCONTINUITY, SOCIAL INTEGRATION AND HEALTH
AMONG EDUCATION MAJORS AT THE UNIVERSITY OF MALAYA[1]

Most social scientists who are interested in studying social mobility assume, either explicitly or implicitly, that upward mobility results in an improvement in the life situation of individuals who experience that process. This assumption is largely based on an impressive body of evidence which reveal that people who belong to the higher social strata are relatively advantaged vis a vis the lower strata in various ways. As Tumin concludes after reviewing the evidence, "the predominant pattern is that of a positive relationship between class standing and the achievement of desirable things in life."[2]

A weaker, but persistent tradition among those interested in this topic is a concern over the negative consequences of upward mobility on those who are mobile. Almost half a century ago, Sorokin hypothesized that the costs of upward mobility for the individual were a loosening of intimate ties and increased psychosocial isolation and loneliness.[3] Since Sorokin, a number of other writers also have speculated on the potentially disruptive consequences of social mobility on the lives of those who experienced that process.[4]

The reasoning employed by these writers incorporates three interrelated hypotheses. The first of these hypotheses is that mobile individuals are likely to experience dissociation from their non-mobile kin and friends. The second hypothesis posits that many who are mobile encounter difficulty in gaining acceptance by the status group which they expect and wish to join. Therefore, these writers reason that those who are socially mobile are likely to be socially unintegrated relative to those who are non-mobile. The third hypothesis, then, suggests that the state of dissociation is conducive to

the development of psychological and physiological outcomes which are detrimental to the individual. In other words, social discontinuity and its accompanying social isolation are hypothesized to result in various problems such as anxiety, anomie, and illness.

Various studies that have focused on the social and psychological consequences of upward mobility, however, have produced conflicting results. Regarding the purported relationship between social mobility and social dissociation, Warner and Abegglen report that the mobile business leaders they studied have "difficulty in accepting and imposing the kinds of reciprocal obligations that close friendships and intimate contacts imply."[5] In another study, Kessin concludes that those who are upwardly mobile are less integrated and participate less in informal and intimate relationships.[6] Curtis, on the other hand, presents evidence that social mobility does not affect rates of interaction with friends, neighbors, and fellow workers, nor does it influence participation in voluntary organizations.[7]

Similar inconsistencies appear in studies which attempt to determine the psychological consequences of upward mobility. Ellis reports greater incidence of psychosomatic illness among upwardly mobile career women[8] and Hollingshead and Redlick claim to have found a nexus between upward mobility and schizophrenia.[9] Similarly, Kessin argues that the upwardly mobile persons he studied have significantly higher levels of manifest anxiety and psychosomatic symptoms than expected.[10] Against these findings are other studies which report either better emotional or mental health among the upwardly mobile[11] or at least no significant differences.[12]

It should be plain from a study of this literature, that the evidence do not unequivocally support the hypothesis that upward social mobility exacts a psychosocial toll from those who experience it. A possible

explanation for these contradictory results is that people can be differentially affected by a seemingly similar process. For example, it is possible that for some upwardly mobile individuals certain combinations of both individual characteristics and situational factors result in either minimal dissociation or difficulties in becoming integrated into a different status group, whereas the reverse experience could be the case for others due to a different combination of individual and situational factors. There is thus a need to specify in greater detail under what conditions what kinds of people are affected in what ways by experiencing a process such as social mobility. This observation is related to Miller's suggestion that the first task for social scientists is to discover how social mobility differentially affects subgroups of people who have acquired similar social status.[13]

The Continuity-Discontinuity

It would seem that the adoption of an analytical framework utilizing the concepts of "continuities" and "discontinuities" might prove useful in avoiding some of the problems of past research on the social and psychological consequences of social mobility.[14] The logical bases of the related concepts of "continuities" and "discontinuities" could sensitize researchers to the necessity of considering both individual and situational variables in analyzing the social and psychological consequences of social mobility. Previous studies that have focused almost exclusively on the mobile have tended to ignore variations in situations, and this oversight seems important since social mobility is frequently accompanied by geographic mobility. If we are correct in stressing the importance of the situation in affecting the degree to which certain mobile individuals become socially integrated, then conflicting results are virtually inevitable unless situational variables are taken into account.

Two studies on the consequences of lower class individuals in the United States experiencing upward mobility by attending a university illustrate the potential usefulness of the continuity-discontinuity framework. Ellis and Lane studied upwardly mobile undergraduates at Stanford University and found that the lower-class student in their sample were much more likely to be socially isolated and suffer feelings of loneliness than peers of higher social class origin at that rather elitist university.[15] In other words, social mobility produced results in this study which supported the hypothesis that those who are socially mobile experience dissociation and suffer from its effects. Wegner, on the other hand, presents evidence showing that students of lower-class origin at the University of Hawaii were not any more likely to report social isolation than students from more socio-economically advantaged backgrounds.[16] Utilization of social class as an independent variable did not result in different frequencies of social contact, participation in activities, and psychological distress as reported by students in the University of Hawaii sample. Wegner, therefore, concluded that his finding did not support the hypothesis that social mobility produces dissociation which leads to emotional distress.[17]

A plausible explanation of the discrepant findings between these two studies is offered by the "continuities" and "discontinuities" framework. The transition from high school to university for the lower class students at Stanford studied by Ellis and Lane was probably characterized by rather severe forms of discontinuities. These students, who had been uniformly characterized as outstanding in scholarship, leadership, and popularity in high school, became residentially and socially dissociated from their families and high school friends by attending Stanford. While situated in the predominantly upper-middle class milieu of Stanford, these students seem to have

experienced difficulties in being accepted by their higher status peers. For example, Ellis and Lane's own data indicate that lower class students were much less likely to be invited to join a fraternity or an eating club on campus than students from more socio-economically advantaged backgrounds. It is not surprising then that the lower class students at Stanford expressed feelings of loneliness and were described by their upper-middle class peers as "loners" and "hard to know."

In contrast, the University of Hawaii can be described as a pluralistic milieu wherein the type of discontinuities experienced by lower-class students at Stanford are less likely to occur. Unlike Stanford, many lower-class students at the University of Hawaii enroll together with their high school peers and, in addition, those whose families reside in Honolulu commute to the university while living at home. Not only is the University of Hawaii a decidedly unelitist milieu and, therefore, a rather socially and culturally "open" environment to lower-class students, many students are afforded opportunities to maintain considerable continuity in their primary group affiliations. These factors, then, are likely to produce a situation wherein for most students attendance at the University of Hawaii is a rather continuous process from their high school experience.

In light of the above discussion, it would seem that a potentially useful approach in studying the experiences of university and college students would be to analyze the effects of continuities and discontinuities between individual variables (such as socio-economic status, sex, race, and other personal attributes) and contextual variables (e.g., composition of the student body) on indicators of psycho-social integration.[18] This framework suggests that dissociation and its negative effects on the physical and emotional condition of the individual are likely to occur when there

is a lack of "fit" between an individual's salient social characteristics and experiences and his or her social environment.[19]

While the continuity-discontinuity framework provides a reasonable "explanation" for the discrepant findings between the Stanford and University of Hawaii studies, Feldman and Newcomb's review of the research which utilized the discontinuity hypothesis in studying college students indicates that it too has its limitations.[20] Feldman and Newcomb cite various studies, some which revealed the effects of discontinuity, but also some which did not produce results consistent with the discontinuity hypothesis. For example, a researcher discovered that lower class freshman males at Massachusetts Institute of Technology reported "higher morale and personal esprit than other freshmen." Another study found lower and lower-middle class freshmen at Harvard were less unhappy and distressed than freshmen of higher social class origin at that university. Feldman and Newcomb refer to three other studies (conducted at Cornell, Berkeley, and an unnamed college) which reported that lower-class college students were not more socially isolated, more dissatisfied or suffered from more negative self-image than peers from more socio-economically advantaged backgrounds.

In their discussion, Feldman and Newcomb offer possible reasons for the discontinuity hypothesis to be rejected in some cases. They point out, for example, that students from a given category (e.g., students from a working-class background) enrolling in a particular college or university might be quite different from others in that category who attend another school. They suggest that a lower-class student at Harvard might not be the same kind of lower-class individual who attends a low-prestige college elsewhere. Feldman and Newcomb go on to suggest further that there is "no reason to assume that

even within a given college, all students from a given status background are alike in all other background characteristics, prior experiences, attitudes, and values."[21] In other words, there might be considerable variations among people from seemingly similar backgrounds and statuses at a given college or university which will lead to different effects of persumed discontinuities among them.

Feldman and Newcomb's first point seems related to the process of anticipatory socialization.[22] If students from a given background or status are different depending on which university or college they choose to attend, it is reasonable to hypothesize that those who attend a well-known college or university begin to manifest attitudes and behavior somewhat congruent with the public image of the college or university during the students' high school years. Thus lower-class students who hope to attend MIT or Harvard probably would be different in important respects from the average lower-class student who is planning to attend a small college in the local community. If this were the case, anticipatory socialization would tend to counteract the effects of manual-class origin as a source of discontinuity for such students at a high-prestige institution. However, this line of reasoning raises the question as to why the lower-class students at Stanford seemed to experience discontinuities not suffered by students of similar background at Harvard and MIT.

The second point made by Feldman and Newcomb argues for the development of a more fine-grained categorization of students than those commonly utilized by researchers who adopt the continuity-discontinuity hypothesis (e.g., social class, size and type of home community, and sex). They suggest that "different subgroups of students <u>within</u> a status group will react differently to the same overall college environment, will seek out different experiences

within this environment, and will change differently."[23] Regarding this suggestion, an interesting line of inquiry has been identified in the literature on race and political participation in the U.S. which is germane to the topic of this paper.

Two studies of voluntary participation in the U.S. during the 1960s showed that, contrary to earlier surveys, black adults were more active participants than whites if socio-economic status was controlled.[24] Marvin Olsen suggests that the civil rights and "Black Power" movements of the late 1950s and 1960s created a norm of activism among Black Americans which was reflected in their higher rates of participation, especially among those who are conscious of being members of a minority group. If this occurred among black adults, it also could occur among certain sub-categories college students who become politicized (e.g., homosexuals) and become active participants on the campus in politically-related activities.

We shall conclude this section by suggesting that no single conceptual framework will be entirely adequate in terms of "explaining" all the factors associated with the psycho-social integration of college students. This is especially true when it comes to examining the ways in which both personal and contextual factors affect this process. The best we can do is to be as sensitive as possible to the complex inter-relationships which undoubtedly exist and to identify areas where future studies are needed. We shall utilize the continuity-discontinuity framework to analyze our data, but in doing so, we shall also be sensitive to its limitations.

The Study

In this effort to examine the ways in which personal and contextual factors affect psycho-social integration among post-secondary students, we

shall analyze data gathered in 1967 from students in the Faculty of Education at the University of Malaya. The University is located in the capital of Malaysia, a relatively small Southeast Asian nation, and at the time it was the sole university in the country. The students in the Faculty of Education were recent university graduates who had majored in either literal arts or one of the sciences as undergraduates and were studying for a Diploma in Education in order to become teachers in Malaysian secondary schools. There were 187 students officially enrolled in the Faculty of Education at the time the survey was conducted. The instrument utilized was a questionnaire developed by various people at the Institute of International Studies at the University of California at Berkeley for a survey of Latin American university students.[25] The senior author of this paper, who taught one of the courses required for all students, administered the survey instrument during one of lecture periods and 185 students completed the questionnaire anonymously.

In terms of the characteristics of the student body, University of Malaya can be described as a pluralistic milieu. It is co-educational, ethnically diverse (predominantly Chinese and Malay, but also including Indians, Pakistanis, etc.), and somewhat socio-economically heterogenous, although the majority are from non-manual class families. Many students whose families live in the capital commute to school from their homes while most whose families reside elsewhere live on campus in residential colleges. Furthermore, the vast majority have friends who were admitted at the same time from their pre-university classes in secondary school. In many respects, therefore, the University of Malaya is contextually a closer approximation of the University of Hawaii than Stanford. It is logical, therefore, to expect our results to be more similar to the findings reported by Wegner rather than those found by Ellis and Lane. However, there are several potentially

important differences between the Universities of Hawaii and Malaya which merit describing before we present our data.

First of these differences is the rather select nature of the student body as compared to that at the University of Hawaii. Due to the British colonial experience, the Malaysian school system utilizes national examinations to identify the students who are permitted to enroll in the higher educational levels. These examinations are administered at Forms 3, 5, and 6 upper (corresponding the 9th grade, 11th grade, and post 12th grade in the U.S.). Thus, in 1967 less than one percent of the 19 to 21 year olds (the average age bracket of university students in Malaysia) were pursuing university education in that society.[26] Although Wegner does not provide us with an estimate of the proportion of university age people in Hawaii who were attending the University of Hawaii at the time of this study, he does report that 82 percent of the 12,536 full-time undergraduates at the main campus (about 10,280 students) were residents of Hawaii. When this number is contrasted with the University of Malaya's 1967 enrollment of only 4,560 students in a society with a population approximately 10 times that of Hawaii's it should be apparent that the students at the University of Malaya have been screened much more selectively than those at the University of Hawaii.

There are several important implications of the foregoing for this study. First, successfully passing each examination hurdle and gaining admittance into the next grade level could promote the process of anticipatory socialization. In other words, many such students might begin relatively early to acquire the attitudes and behaviors that are congruent with those of high status adults in Malaysia. This is especially true at the Form 6 level (two years of pre-university study in secondary schools) since most of these students could realistically plan to attend the University of Malaya.

Second, a person who is a university student in Malaysia is likely to be accorded a higher status than a university student in Hawaii. In that sense, it can be said that the University of Malaya has a "charter" to produce Malaysia's future elite and the assignment of that function to the University of Malaya by the political system is to endow its students a generalized status that might be more socially salient than his or her ascribed statuses (e.g., age, sex, and ethnicity).[27] Although these possibilities have important implications for this study, we cannot test them directly due both to lack of relevant data and to our utilization of an instrument which is not compatible with Wegner's.

However, we can compare and contrast our findings to those of Wegner in more specific ways. Wegner found little or no difference by race or national origin among the University of Hawaii students in terms of either participation or emotional and mental health. This finding suggests that the student's race or ethnicity did not result in a marginal status in that milieu. At the University of Malaya, however, due to a complex historical process, most of the students from rural areas and/or of lower class background are Malays, whereas the vast majority of the students who are from the larger cities and/or of higher social class origin are Chinese.[28] Therefore, attendance at the University of Malaya would seem to entail greater discontinuities for some Malays than for most Chinese. On the other hand, nearly all Malay students attending the University during the time of this survey were recipients of government scholarships while only a small percentage of non-Malay students were being similarly sponsored by the Malaysian government.[29] The fact that many Malay university students had previously attended either a segregated secondary school reserved for Malays at no cost or an integrated school with financial assistance from the government suggests a kind of

continuity for them that few non-Malays experience. Furthermore, the Malays, as a community, are much more politicized than are the non-Malays.[30] While we cannot discuss this in great detail due to limitations of space, it should be noted that Malay University students have been described elsewhere to be more actively engaged in demonstrations against the Malaysian government than students from other ethnic groups.[31]

Although Wegner reported that there were no observable differences by sex in the various indicators of participation and psychological health among students attending the University of Hawaii, it could be the case that being a female as opposed to being a male entails greater discontinuities for those attending the University of Malaya.[32] In both Malay and Chinese cultures, females are accorded much lower status than males. Malays are almost universally Muslims and females enjoy fewer rights and privileges as dictated by the prescriptions of Islam. On the other hand, the Chinese culture endows males with far greater rights than females. However, as it was explained earlier, both anticipatory socialization and being members of an elite group attending a university might mean that Malaysian female university students do not experience severe discontinuities. Not only are these women destined to be members of an elite group enjoying high status in the Malaysian society, impressionistic observation suggest that they generally anticipate their future lives to entail combining both marriage and a career with the support of servants.

For this paper, then, we shall examine the degree to which the student's social class background, ethnicity, sex, and residence of origin affects his or her psycho-social integration as a student at the University of Malaya. The independent variables selected for our analysis constitute potential sources of continuity-discontinuity between ascribed status characteristics

and the achieved status of a university student in Malaysia. However, we have described how these independent variables are somewhat ambiguous in terms of whether or not they constitute discontinuities. The pluralistic character of the University of Malaya student body might result in low social class and rural origin not being a source of discontinuity especially if the student had the political and economic advantage of being Malay. The effect of ethnicity and sex is, as we explained, also ambiguous as either a continuous or discontinuous experience. In addition to the ambiguities already identified in the previous two paragraphs, the reader is reminded that highly selective educational system could counteract what otherwise might be a discontinuous experience. Our purpose is to examine the data in terms of what they tell us about variations among students within the social system(s) in the University of Malaya.

The Sample

While the original sample consisted of 185 persons, it was decided to eliminate some cases from the data analysis in order to reduce the heterogeneity of the sample. Those eliminated were Indians, Pakistanis, and Eurasians, those who had attended a university other than the University of Malaya, and those who had graduated from the University of Malaya three or more years before enrolling in the Diploma of Education program. This reduced the sample from 185 to 136 cases. Of these, 29 were Malay males, 23 were Chinese males, 14 were Malay females, and 70 were Chinese females. In terms of their socio-economic status, the vast majority were of non-manual class origins. Ninety percent (123 cases) of this sample reported that their fathers were either professional, technical, managerial, entrepreneural, clerical or sales workers. Only ten percent (13 cases) identified their

father's occupations as being manual class; skilled, semi-skilled. and unskilled workers (including farmers). When it came to identifying their place of residence between the ages of seven and fifteen, 56 students (41 percent) named one of the three largest cities in the country and the rest (80 cases or 59 percent) identified a town or a village as their place of residence. The small number of Malay females and persons of working-class background creates some problems in our data analysis. Therefore, we will be quite cautious in interpreting some of our findings.

The Indicators of Social Integration and Health

For the purposes of this paper, we wish to examine the effect of social class, ethnicity, sex, and place of origin on the social integration and health of the students in our sample. Most sociologists since Durkheim have assumed that varying levels of social integration affects a person's physical and emotional health and previous studies on both formal and informal types of interactions have shown the positive consequences of social integration on a person's biopsychological condition.[33] The questionnaire utilized contained various items which allow us to construct three separate indicators of social integration. These three indicators are: (1) past participation in organized activities as an undergraduate student; (2) interaction with other students involving personal, academic, and career matters as well as interest in art and literature; and (3) engaging in discussions of politics with fellow students. These indicators provide us with measures of social integration along three dimensions. Membership in student organizations tap engagement

in formal groups. Frequency levels of engaging in discussions with other students about politics and matters of personal interests offer indicators of the student's interaction in informal associations. In addition to these three indicators of social integration, an indicator of biopsychosocial condition representing relative health was utilized. This fourth measure will enable us first to see how different measures of social affiliation affect the emotional and physical well-being of the students in this sample and to compare this to the direct relationship between the independent variables and health. This comparison will make it possible to address the question of whether the negative effects of discontinuity on health are dependent upon consequent social isolation as suggested by Sorokin.

The first indicator of social integration we shall utilize is past participation in organized activities as an undergraduate student. The students' responses to the following questions are utilized to create a measure of participatory behavior in formal organizations:[34]

> Have you attended any meeting of a society of the university in the last six months of your studies?
>
> Did you belong to a national party or organization?
>
> Did you belong to a student political party?
>
> Did you belong to cultural organizations (those concerned with presenting plays, concerts, art expositions, literary meetings, etc.)?
>
> Did you belong to religious associations?
>
> Did you belong to a social or sports organization (athletic club, club that presents social events, dances, etc.)?
>
> Did you belong to any other type of organization?
>
> Did you occupy a position of formal responsibility (e.g., elected or appointed position) within one or more student organizations?

The students were asked to circle either "yes" or "no" after each of the questions listed above. The number of times a respondent circled "yes" was

summed and those who answered "yes" twice or less were categorized as "low" participators (75 cases or 55 percent). Those who circled three or more "yeses" were designated as "high" participators (61 cases or 45 percent).

The other two indicators of social integration were derived from the following items. The students were asked: How often did you discuss the following topics with fellow students during the past month?

1. personal problems
2. academic and career
3. art and literature
4. national politics
5. international politics
6. student politics at your university
7. student politics in general

After each item, the students were asked to circle one of the following: (1) everyday; (2) every two or three days; (3) at least once a week; (4) less than once a week, but at least once a month; and (5) less than once a month.

The first three items were combined to create an index which we shall label "personal interaction." The Pearson Correlation Coefficients for these three items were .35 for items 1 and 2, .29 for items 1 and 3, and .31 for items 2 and 3. Items 4 through 7 were combined to form an index which will be referred to as "political interaction" in this paper. The Pearson Correlation Coefficients for these items ranged from .39 to .81.[35] In tabulating these items, we collapsed "everyday" and "every two or three days" and scored them as "3." Responses of "at least once a week" and "less than once a week, but at least once a month" were scored as "2." "Less than once a month" was scored as "1." The recoded responses were summed for the purpose of dichotomizing respondents into "high" and "low" categories. Sixty-three respondents (46 percent) were considered to be "high" in "personal interaction" and conversely 73 cases or 54 percent were designated as "low." Eighty respondents (59 percent) were categorized as "high" in "political interaction" and 56 students (41 percent) were considered to be "low."

The indicator of health which is used in this paper is an index constructed from ten items that asked respondents to indicate how frequently they suffered from various problems such as nausea and nightmares. We assume that the reporting of low incidence of such problems indicated relative physical and emotional well being and high incidence indicated either relative physical or emotional distress. These items are as follows:[36]

1. Have you been bothered by nausea or stomach pains?
2. Have you experienced headaches?
3. Have you had feelings of dizziness?
4. Have you had difficulties getting to sleep, either because you were thinking about something or for other reasons?
5. Do you chew your fingernails?
6. Do you have nightmares?
7. Do you have feelings of fear or anxiety at night, during sleep?
8. Do your palms sweat?
9. Have you experienced cold perspirations?
10. Have you felt depressed and sad?

The students were asked to circle one of the following: (1) frequently, (2) fairly often, (3) rarely, and (4) never.

Our data analysis revealed that while some of these items were strongly inter-correlated, others were not. The Cronbach's alpha for these items is .73. The responses were dichotomized with "frequently" or "fairly often" being considered as a complaint and "rarely" or "never" as indicating the absence of a problem. The socres were summed and the 87 respondents (64 percent) who reported two or less complaints were considered to be relatively "healthy" and the rest (49 cases or 46 percent) who circled "frequently" or "fairly often" to three or more items were considered to be relatively "ill."

The Results

Table One describes the direct relationship between selected background variables and the four indicators of social integration and health utilized in this paper. The independent variables of sex, ethnicity, social class, and residence of origin are shown to have varying degrees of relationship with the four dependent variables. The effect of sex on the indicators of social integration and health reveal that males, as anticipated, are relatively more socially integrated and healthier than females. Males were higher on participation in organizations and higher in political interaction. More males perceived themselves to be relatively healthy. However, slightly more females were higher on interactions with others on personal matters.

Regarding the effect of ethnicity, Table One reveals that Malay students were more participatory than Chinese in formal organizations. There was no apparent effect of ethnicity on frequency of personal interaction or on health. However, reflecting their community's relatively higher degree of politicization, Malays were much more likely than Chinese to be categorized as "high" in discussing politics with fellow students.

Table One around here

Compared to sex and ethnicity, the relationships between social class origin and the indicators of social integration and health are weak when these data are analyzed directly. The only demonstrated difference is the effect of social class on discussing politics. Coming from non-manual class background is negatively associated with frequent discussion, but the association is low.

The effect of residence of origin is virtually negligible for this sample. There is almost no urban-rural variation except that those from urban

background were less active in interacting about political matters, but the difference is small. Although rural to urban migration has been shown elsewhere to have a negative effect on health, this is not apparent in this table.[37]

While Wegner found no difference in the way males and females responded in his University of Hawaii study, this is clearly not the case here.[38] Because sex obviously is an important factor and since there are more females than males in this sample, we shall reanalyze the effects of ethnicity, SES, and residence of origin on the dependent variables controlling for sex.

Table Two presents the effect of ethnicity, social class and residence of origin on participation in organizations with sex held constant. Although none of the differences are very striking, there is a tendency for Malay males to be high in organizational participation. Among females, those who are Malay and who are of urban origin are more likely to be active participators in organizations.

Table Two around here

The other two indicators of social integration involve frequency of reported interaction with friends in discussion of personal concerns and politics. As can be seen in Table Three, females are, on the whole, more active in discussing matters of personal concern and display greater variation than males. High interaction among the females is associated with being Malay and with non-urban residence.

Table Three around here

On the other hand, the data in Table Four indicate that Malay males are active in discussing politics (gamma = 0.82). There is very little variation

in the effect of social class and residence of origin on this variable. Not only is there almost no variation among females based on ethnicity and residence of origin, the percentages in the female column representing high levels of political interaction are uniformly lower than those in the male column.

Table Four around here

In order to examine the effects of social integration on the health of the students in this sample, we reanalyzed the data by introducing the three indices of social integration as independent variables and then as intervening variables. The reader will recall that we are utilizing an analytical framework which hypothesizes that background variables affect degrees of social integration in a given situation and that differences in levels of social integration in turn affects the biopsychological status of individuals. On the basis of the literature reviewed, we anticipate that social integration will have a positive effect on health. Table Five illustrates that, as anticipated, low membership in organizations and poor health are associated for males, but the relationship between these variables is low for females. Social interaction based on personal interests reveal no relationship with variations in health for either males or females. However, high level of discussing politics is related to poor health, and this relationship is substantial for males while it is low for females. Although the purpose for presenting these data is to prepare the way for the next stage of our data analysis, it is worth noting that the association between high interaction revolving around discussing politics and poor health for this sample of students contradicts what would have been the expected results.

Table Five around here

A logical extension of our analysis thus far is to examine the effect of social integration as an intervening variable between the other background variables utilized in this study and variations in health. We have seen in Table Five that membership in organizations has a positive effect on health, but political interaction is negatively associated with health. These associations are quite substantial for males. Now we want to see what these relationships will be when we utilize these indicators of social integration as intervening variables in the relationships between background variables and health. When we do this, however, the number of cases in each cell becomes extremely small, and it will be necessary to treat the results with considerable caution.

Table 6a presents the direct relationship between ethnicity and health with sex controlled. Chinese males are healthier than Malay males, but there is little difference in health between Malay and Chinese females. The effect of social integration as an intervening variable on the relationship between ethnicity and health for Malay and Chinese males and females is presented in Table 6b. While it is apparent that those who are higher in organizational participation are consistently healthier, it is also apparent that regardless of organizational membership, Chinese males are healthier than Malay males, and there is little difference between Malay and Chinese females. In addition, regardless of level of interaction related to personal matters, Chinese males are healthier than Malay males. Malay females of high personal interaction appear healthier than Chinese females though it should be noted that the number of cases is small (14). Furthermore, regardless of level of political interaction, Chinese males seem healthier than Malay males, but there is only a little difference between Malay and Chinese females. Except, then, for the relationship between personal interaction, ethnicity and health among Malay

females, these are the same sets of relationships seen when the direct effect of ethnicity and health is examined in Table 6a.

Tables 6a & 6b around here

In addition to assessing the intervening effect of social integration on the relationship between ethnicity and health, we have looked at the relationship between social class and health utilizing the three indicators of social integration as intervening variables. In Table 7a, we see that males of manual class background tend to be less healthy than males from white-collar homes. Because there were only two females of manual class background in this sample, comparison between females of different social class origin would be meaningless. The question of whether or not social interaction reduces the magnitude of the relationship between social class and health is examined in Table 7b. The results indicate that it does not. Regardless of social interaction level, males of non-manual class background are consistently healthier than those of manual class background.

Tables 7a & 7b around here

Tables 8a and 8b examine the effect of social integration as an intervening variable on the relationship between the third background variable, residence of origin, and health. Table 8a presents the direct relationship between residence of origin and health. The differences are small. When the three indicators of social integration are utilized as intervening variables, it can be seen in Table 8b that the effects are also quite modest. Thus, it appears that males from non-urban areas are generally as healthy as urban males regardless of the levels of social interactions. In contrast, social participation and interaction may have a slight intervening effect among females.

Rural females who have a higher level of organizational membership and interaction related to personal matters appear healthier than urban females with similar levels of organizational participation and interaction.

Tables 8a & 8b around here

It is interesting to note that the intervening effect of low interaction as a factor promoting illness does not appear when interaction related to political matters is examined among rural females in this sample. It would appear that those females of rural origin with a low interaction level in discussing politics are not unhealthier, but are healthier than urban females of similar interaction level. This is particularly interesting in relation to the overall effect of political interaction as a variable influencing health. The overall effect of interactions along this dimension has been seen to be consistently negative. In this one instance when it appears to have an intervening effect, the effect is again negative. Consequently, both the direct effect and the intervening effect are the opposite of what would be predicted by a conceptual framework which hypothesizes that low social interaction has a negative effect on health.[39]

Discussion

We have seen that direct relationships seem to exist only between two of the four background variables and three of the four indicators of social integration and health utilized in this paper. Sex and ethnicity are directly related to some of the dependent variables, but social class and residence of origin are not. Females are noticeably less participatory in organizations, lower in interaction over politics, and less healthy than males. Chinese students are decidedly less participatory in organizations and less likely to

report engaging in discussing politics than Malays. If we had chosen to confine our data analysis at this level, we would have concluded that being female or Chinese seems to result in a marginal status as a student at the University of Malaya.

However, further analysis reveal more complex patterns that deter us from drawing broad conclusions about this sample of students. For example, regardless of ethnicity, social class or residence, being female is negatively associated with most of the selected indicators of social integration and health. What is particularly worth noting is that these negative associations are quite uniform and do not vary much even when other factors are introduced as controls. On the other hand, the effect of being male varies considerably depending on ethnicity and social class. Chinese males tend to be generally lower than Malay males in frequency of interactions over political matters, but Malay males are more likely to be less healthy than Chinese males. Furthermore, being a working class male is negatively associated with health.

Briefly reviewing some of our other findings, the positive association between organizational membership and health pose no problems of interpretation. Based on the existing literature, we anticipated this finding. The relationship between interaction over personal concerns and health reveal no consistent pattern. However, the negative association between discussing politics and health was unanticipated and is difficult to interpret. It suggests that while the overall effect of social integration on health is probably positive, there might be circumstances under which certain types of social interaction have negative consequences for individuals. This seems to be the case when we looked at the relationship between social interaction related to political matters in the situation described in this study. This negative association is found consistently regardless of the introduction of control

variables; those who reported lower frequency of engaging in political discussions reported fewer signs and symptoms of ill health. Why this should be so among students at the University of Malaya and whether or not this is also the case among university students in other societies is a question for future study.

The conceptual framework we utilized in this paper predicted an intervening effect of social integration on health. If there were such an effect, the relationship between background factors and health should have virtually disappeared or diminished considerably when controlled for social interaction. Except in the effect between residence of origin and health among females, this was not the case. This is particularly noteworthy since the negative effect of mobility on health has long been assumed to be so because mobility uproots the individual from his familiar social situation causing social isolation, loneliness and personal anomia. Apparently the causal chain is not that simple.

Summary

We hope that this paper serves to illustrate the need for those who study a process such as social mobility to control for situational factors in order to observe more precisely what categories of people are affected in what ways in a given social context. The data which we present in this paper should alert the reader to the possibility that a process such as social mobility does not have a uniform effect on people. For this sample of Malaysian University students, sex and ethnicity turn out to be more salient than social class in affecting the dimensions of social integration and health we selected for this study. The effect of social class background in influencing social integration and health among these students seems to be mainly

in conjunction with sex and ethnicity. In other words, social class origin seems to make a difference only in terms of its joint effects with another factor, e.g., non-manual class (or manual class) Chinese and Malay or non-manual class (or manual class) male and, therefore, the observed relationships utilizing social class as an independent variable are not always uniform and predictable. To what extent this is due to the effects of anticipatory socialization or the special status of being university students cannot be ascertained by this data. Perhaps future studies conducted by people who are sensitive to these issues might provide further insights into this area of inquiry. In particular, comparative studies of white male and minority college and university students (e.g., Black, Hispanic, American Indian, women in male-dominated majors such as engineering, etc.) in the United States seem to be needed. We shall conclude, therefore, by stating that the utilization of the continuity-discontinuity conceptual framework does seem to be useful in analyzing a complex topic such as the one we chose to discuss in this paper. However, it is also clear that we have raised more questions than we have answered. This is often the case when an academic inquiry like this one opts for a wider scope of analysis than identifying a set of hypotheses to test. The latter approach can result in "yes" or "no" answers at a predetermined level of confidence. However, a sample of students from another society like those in our study required a more tentative approach. Furthermore, this is particularly true when the effort is of an exploratory nature such as this where the adoption of a model considering only mobility and integration would have presented only a partial view of an extremely complex phenomenon.

TABLE 1

RELATIONSHIP BETWEEN SEX, ETHNICITY, SOCIAL CLASS ORIGIN, RESIDENCE OF ORIGIN, AND SELECTED INDICATORS OF PSYCHO-SOCIAL INTEGRATION

Indicators of Psycho-Social Integration	Sex		Ethnicity		Social Class		Residence of Origin	
	Male	Female	Malay	Chinese	Non-Manual	Manual	Urban	Not Urban
Membership in Organizations. (% with relative high level)	60	36	61	38	45	46	45	45
	gamma:	0.45	gamma:	0.43	gamma:	0.03	gamma:	0.01
Frequency of interaction related to personal matters. (% with relative high level)	40	50	49	45	46	54	45	48
	gamma:	0.19	gamma:	0.07	gamma:	0.17	gamma:	0.06
Frequency of interaction related to political matters. (% with relative high level)	77	48	80	50	58	69	54	63
	gamma:	0.57	gamma:	0.59	gamma:	0.24	gamma:	0.18
Occurrence of selected health signs and symptoms. (% in relative poor health)	25	43	37	35	36	38	37	35
	gamma:	0.38	gamma:	0.04	gamma:	0.06	gamma:	0.05
N =	52	84	43	93	123	13	80	56

*Percentages in this and all subsequent tables have been rounded off to whole numbers.

TABLE 2

RELATIONSHIP BETWEEN ETHNICITY, SOCIAL CLASS ORIGIN, RESIDENCE OF ORIGIN, AND ORGANIZATION MEMBERSHIP AMONG MALAYSIAN MALE AND FEMALE UNIVERSITY STUDENTS

Background Variables		Percent with Relative High Level of Organization Membership	
		Male (n=52)	Female (n=84)
Ethnicity	Malay	66 (29)*	50 (14)
	Chinese	52 (23)	33 (70)
		gamma: 0.27	gamma: 0.34
Social Class	Non-Manual	63 (41)	35 (82)
	Manual	46 (11)	** (2)
		gamma: 0.35	
Residence of origin	Urban	53 (15)	42 (41)
	Not Urban	62 (37)	30 (43)
		gamma: 0.18	gamma: 0.24

*The numbers in parentheses represent denominators for the various categories from which the percentages were calculated. For example, the number 29 indicates that there were 29 Malay males in the sample of whom 65.5 percent (19 cases) were designated as being "high" in organizational participation.

**Number of cases in this cell is too small for meaningful comparison.

TABLE 3

RELATIONSHIP BETWEEN ETHNICITY, SOCIAL CLASS ORIGIN, RESIDENCE OF ORIGIN, AND INTERACTION RELATED TO PERSONAL MATTERS AMONG MALAYSIAN MALE AND FEMALE UNIVERSITY STUDENTS

Background Variables		Percent with Relative High Level of Interaction Related to Personal Matters	
		Male (n=52)	Female (n=84)
Ethnicity	Malay	41 (29)*	64 (14)
	Chinese	39 (23)	47 (70)
		gamma: 0.05	gamma: 0.34
Social Class	Non-Manual	39 (41)	49 (82)
	Manual	46 (11)	** (2)
		gamma: 0.13	
Residence of origin	Urban	38 (37)	44 (41)
	Not Urban	47 (15)	56 (43)
		gamma: 0.18	gamma: 0.23

*The numbers in parentheses represent denominators for the various categories from which the percentages were calculated.

**Number of cases in this cell is too small for meaningful comparison.

TABLE 4

RELATIONSHIP BETWEEN ETHNICITY, SOCIAL CLASS ORIGIN, RESIDENCE OF ORIGIN, AND INTERACTION RELATED TO POLITICAL MATTERS AMONG MALAYSIAN MALE AND FEMALE UNIVERSITY STUDENTS

Background Variables		Percent with Relative High Level of Interaction Related to Political Matters	
		Male (n=52)	Female (n=84)
Ethnicity	Malay	93 (29)*	50 (14)
	Chinese	57 (23)	47 (70)
		gamma: 0.82	gamma: 0.06
Social Class	Non-Manual	79 (41)	48 (82)
	Manual	73 (11)	** (2)
		gamma: 0.14	
Residence of origin	Urban	73 (15)	46 (41)
	Not Urban	78 (37)	49 (43)
		gamma: 0.14	gamma: 0.05

*The numbers in parentheses represent denominators for the various categories from which the percentages were calculated.

**Number of cases in this cell is too small for meaningful comparison.

TABLE 5

RELATIONSHIP BETWEEN SELECTED ASPECTS OF SOCIAL INTERACTION AND HEALTH AMONG MALAYSIAN MALE AND FEMALE UNIVERSITY STUDENTS

Level of Participation and Interaction		Percent in Relative Poor Health	
		Male (n=52)	Female (n=84)
Membership in Organization	High	16 (31)*	37 (30)
	Low	38 (21)	46 (54)
		gamma: 0.52	gamma: 0.20
Frequency of interactions related to personal matters	High	24 (21)	43 (42)
	Low	26 (31)	43 (42)
		gamma: 0.05	gamma: 0.00
Frequency of interactions related to political matters	High	30 (40)	50 (40)
	Low	8 (12)	36 (44)
		gamma: 0.65	gamma: 0.27

*The numbers in parentheses represent denominators for the various categories from which the percentages were calculated.

TABLE 6a

RELATIONSHIP BETWEEN ETHNICITY AND HEALTH AMONG MALAYSIAN UNIVERSITY STUDENTS

Percent in Relative Poor Health

Male (n=52)		Female (n=84)	
Malay	Chinese	Malay	Chinese
38 (29)*	9 (23)	36 (14)	44 (70)
gamma: 0.73		gamma: 0.18	

TABLE 6b

EFFECT OF SOCIAL INTERACTION ON THE RELATIONSHIP BETWEEN ETHNICITY AND HEALTH AMONG MALAYSIAN UNIVERSITY STUDENTS

Percent in Relative Poor Health

Indicators of Social Interaction		Male (n=52)		Female (n=84)	
		Malay n=29	Chinese n=23	Malay n=14	Chinese n=70
Membership in organization	High	26 (19)*	0 (12)	29 (7)	39 (23)
	Low	60 (10)	18 (11)	43 (7)	47 (47)
		gamma: 0.62	gamma: 1.00	***	gamma: 0.16
Frequency of interactions related to personal matters	High	42 (12)	0 (9)	22 (9)	48 (33)
	Low	35 (17)	14 (14)	60 (5)	40 (37)
		gamma: 0.13	gamma: 1.00	***	gamma: 0.16
Frequency of interaction related to political matters	High	37 (27)	15 (13)	43 (7)	51 (33)
	Low	** (2)	0 (10)	29 (7)	38 (37)
			gamma: 1.00	***	gamma: 0.27

*The numbers in parentheses represent denominators for the various categories from which the percentages were calculated.

**Number of cases in this cell is too small for meaningful comparison.

***Gamma not reported because expected frequencies in cells are less than five. See James A. Davis, Elementary Survey Analysis (Englewood Cliffs, NJ: Prentice Hall, 1971), p0. 50-51.

TABLE 7a

RELATIONSHIP BETWEEN SOCIAL CLASS ORIGIN AND HEALTH AMONG MALAYSIAN UNIVERSITY STUDENTS

Percent in Relative Poor Health

Male (n=52)		Female (n=84)	
Non-Manual	Manual	Non-Manual	Manual
19 (41)*	45 (11)	44 (82)	** (2)
gamma: 0.55			

TABLE 7b

EFFECT OF SOCIAL INTERACTION ON THE RELATIONSHIP BETWEEN SOCIAL CLASS ORIGIN AND HEALTH AMONG MALAYSIAN UNIVERSITY STUDENTS

Percent in Relative Poor Health

Indicators of Social Interaction		Male (n=52)		Female (n=84)	
		Non-Manual n=41	Manual n=11	Non-Manual n=82	Manual n=2
Membership in organization	High	11 (26)*	40 (5)	38 (29)	**
	Low	33 (15)	50 (6)	48 (53)	**
		gamma: 0.59	***	gamma: 0.19	
Frequency of interactions related to personal matters	High	12 (16)	60 (5)	45 (40)	**
	Low	24 (25)	33 (6)	43 (42)	**
		gamma: 0.38	***	gamma: 0.04	
Frequency of interaction related to political matters	High	25 (32)	50 (8)	51 (39)	**
	Low	0 (9)	33 (3)	37 (43)	**
		***	***	gamma: 0.28	

*The numbers in parentheses represent denominators for the various categories from which the percentages were calculated.

**Number of cases in this cell is too small for meaningful comparison.

***Gamma not reported because expected frequencies in cells are less than five. See James A. Davis, Elementary Survey Analysis, pp. 50-51.

TABLE 8a

RELATIONSHIP BETWEEN RESIDENCE OF ORIGIN AND HEALTH AMONG MALAYSIAN UNIVERSITY STUDENTS

Percent in Relative Poor Health

Male (n=52)		Female (n=84)	
Urban	Not Urban	Urban	Not Urban
20 (15)*	27 (37)	44 (41)	42 (43)
gamma:	0.19	gamma:	0.04

TABLE 8b

EFFECT OF SOCIAL INTERACTION ON THE RELATIONSHIP BETWEEN RESIDENCE OF ORIGIN AND HEALTH AMONG MALAYSIAN UNIVERSITY STUDENTS

Percent in Relative Poor Health

Indicators of Social Interaction		Male (n=52)		Female (n=84)	
		Urban n=15	Not Urban n=37	Urban n=41	Not Urban n=43
Membership in organization	High	12 (8)*	17 (23)	41 (17)	31 (13)
	Low	29 (7)	43 (14)	46 (24)	47 (30)
		**	gamma: 0.56	gamma: 0.09	gamma: 0.33
Frequency of interactions related to personal matters	High	13 (7)	29 (14)	50 (18)	37 (24)
	Low	25 (8)	26 (23)	39 (23)	47 (19)
		**	gamma: 0.06	gamma: 0.22	gamma: 0.20
Frequency of interaction related to political matters	High	27 (11)	31 (29)	47 (19)	53 (21)
	Low	0 (4)	12 (8)	41 (22)	32 (22)
		**	gamma: 0.52	gamma: 0.13	gamma: 0.40

*The numbers in parentheses represent denominators for the various categories from which the percentages were calculated.

**Gamma not reported because expected frequencies in cells are less than five. See James A. Davis, Elementary Survey Analysis, pp. 50-51.

FOOTNOTES

1. We wish to acknowledge the contributions of Bruce Saunders who initially worked with us on this paper. Marylee Taylor and Kathryn Moore at Penn State University also made valuable suggestions for improving many parts of the original manuscript.

2. Melvin M. Tumin, Social Stratification: The Forms and Functions of Inequality, (Englewood Cliffs, NJ: Prentice-Hall, 1967), p. 64.

3. Pitirim A. Sorokin, Social Mobility, (New York: Harper and Brothers, 1927), pp. 522-525.

4. Peter M. Blau, "Social Mobility and Interpersonal Relations," American Sociological Review, 21 (June 1956), pp. 290-295; Morris Janowitz, "Some Consequences of Social Mobility in the United States," Transactions of the Third World Congress of Sociology, (London: International Sociological Association, 1956); Lloyd Warner and James C. Abegglen, Big Business Leaders in America, (New York: Harper & Row, 1956); Seymour M. Lipset and Reinhard Bendix, Social Mobility in Industrial Society, (Berkeley: University of California Press, 1959); Philip Slater, The Pursuit of Loneliness, (Boston: Beacon Press, 1970); Alvin Toffler, Future Shock, (New York: Random House, 1970).

5. Warner and Abegglen, op cit., p. 90.

6. Kenneth Kessin, "Social and Psychological Consequences of Intergenerational Occupational Mobility," American Journal of Sociology, 77 (July 1971), pp. 1-18.

7. Richard F. Curtis, "Occupational Mobility and Urban Social Life," American Journal of Sociology, 65 (November 1959), pp. 296-298; and

7. con't. Richard F. Curtis, "Occupational Mobility and Membership in Formal Voluntary Association: A Note on Research," American Sociological Review, 24 (December 1959), pp. 846-848.

8. Evelyn Ellis, "Social Psychological Correlates of Upward Social Mobility Among Unmarried Career Women," American Sociological Review, 17 (October 1952), pp. 558-563.

9. August B. Hollingshead and Frederick C. Redlich, "Social Mobility and Mental Illness," American Journal of Psychiatry, 112 (September 1955), pp. 179-185.

10. Kessin, op cit., pp. 11-12.

11. Leo, Srole, Thomas S. Langner, Stanley T. Michael, Marion K. Opler, and Thomas A. C. Rennie, Mental Health in the Metropolis: The Midtown Mahatten Study, (New York: McGraw-Hill, 1962); Thomas S. Langner and Stanley T. Michael, Life Stress and Mental Health: The Midtown Manhattan Study, (New York: The Free Press, 1963); Elizabeth Douvan and Joseph Adelson, "The Psychodynamics of Social Mobility in Adolescent Boys," Journal of Abnormal and Social Psychology, 58 (January 1958), pp. 31-44.

12. Eldon L. Wegner, "The Effects of Upward Mobility: A Study of Working Status College Students," Sociology of Education, 46 (Summer 1973), pp. 263-279.

13. S. M. Miller, "The Future of Social Mobility Studies," American Journal of Sociology, 77 (July 1971), pp. 62-65.

14. The terms "continuities" and "discontinuities" were introduced into social science literature by Ruth Benedict. See her "Continuities and Discontinuities in Cultural Conditioning." Psychiatry, 1 (May 1938), pp. 161-167.

15. Robert A. Ellis and W. Clayton Lane, "Social Mobility and Social Isolation: A Test of Sorokin's Dissociative Hypothesis," American Sociological Review, 32 (April 1967), pp. 237-253.

16. Eldon L. Wegner, "The Effects of Upward Mobility: A Study of Working Status College Students," pp. 263-279.

17. Unlike Ellis and Lane, Wegner did not treat his indicators of social contact and participation as intervening variables between social class background and psychological problems. Had he done so, he might have found that the socially isolated lower-class individuals were more likely to report psychological problems than the lower-class students who were more socially integrated.

18. We are assuming, as did most of the people whose work we have reviewed, that social integration has a positive affect on a person's biopsychological condition. The logic underlying this assumption is traceable to Durkheim's reasoning in his classic study of suicide.

19. There is a corollary to this line of reasoning in the epidemiological literature. For example, investigation with a similar continuity-discontinuity framework has been developed by those who utilize the concepts of role change stress. One of the striking findings of this body of literature is the consistently negative relationship between role change

stress and health which has been seen in studies using different human populations with varying methodologies and focused on different aspects of health. Essentially the same negative relationship is reported in all these studies. The reader who is interested in reading a more detailed review of this literature should consult John Cassel, "The Contribution of the Social Environment to Host Resistance," American Journal of Epidemiology, 104 (August 1976), pp. 107-123 or E. K. Eric Gunderson and Richard H. Rahe (eds.), Life Stress and Illness, (Springfield, IL: Charles C. Thomas, 1974). This body of literature also suggest that other variables such as integration into social support systems and maintenance of traditional values and patterns of behavior interact with role change stress; e.g., Katherine Nuckolls, John Cassel, and Berton Kaplan, "Psychosocial Assets, Life Crisis and the Prognosis of Pregnancy," American Journal of Epidemiology, 95 (May 1972), pp. 431-441; Michael Marmot and S. Leonard Syme, "Acculturation and Coronary Heart Disease in Japanese-Americans," American Journal of Epidemiology, 104 (September 1976), pp. 225-247; and Carol Hogue, "Support Systems for Health Promotion," Distributive Nursing Practice: A Systems Approach to Community Health, edited by Joanne Hall and Barbara Weaver, (Philadelphia: J. B. Lippincott Company, 1977), pp. 65-80. It has specifically been suggested that such variables have a buffering effect and as such act to promote or maintain health even under circumstances such as mobility, life discontinuity, and role change stress. While such a proposition is testable, it is beyond the scope of this paper which proposes to address the framework suggested by Sorokin.

20. Kenneth A. Feldman and Theodore M. Newcomb, The Impact of College on Students, 1 (San Francisco: Jossey-Bass, 1969), pp. 275-280.

21. Kenneth A. Feldman and Theodore M. Newcomb, The Impact of College on Students, p. 284.

22. See Robert K. Merton and Alice S. Rossi's discussion of anticipatory socialization in Merton's Social Theory and Social Structure, revised edition, (New York: Free Press, 1957), pp. 265-268.

23. Kenneth A. Feldman and Theodore M. Newcomb, The Impact of College on Students, p. 284.

24. Marvin E. Olsen, "Social and Political Participation of Blacks," American Sociological Review, 35 (August 1970), pp. 282-297; and Sidney Verba and Norman H. Nie, Participation in America, (New York: Harper & Row, 1972), pp. 151-173.

25. Seymour Martin Lipset was the director of the Institute when the questionnaire was constructed. The authors wish to express their gratitude to him for providing the senior author of this paper with a copy of the questionnaire and granting permission for its use. The original questionnaire is reproduced in Arthur Liebman, et al., Latin American University Students: A Six Nation Study, (Cambridge: Harvard University Press, 1972), pp. 237-262.

26. The Ministry of Education Malaysia, Educational Statistics of Malaysia, 1938 to 1967, (Kuala Lumpur: Dewan Bahasa dan Pustaka, 1968), pp. 6-7.

27. John W. Meyer, "The Charter: Conditions of Diffuse Socialization in Schools," in Social Processes and Social Structure, edited by W. R. Scott, (New York: Holt, Rinehart and Winston, 1970), pp. 564-578.

28. These differences between Malay and Chinese students reflect the socio-economic and residential patterns of the Malays and Chinese in Malaysia. The Malays, who are Muslims and who culturally belong to the Malayo-Polynesian group, largely control the political system of the society. They tend to live in rural areas and the majority pursue subsistence

farming and small-scale fishing to their livelihood. The Chinese, who emigrated to the area during British colonial rule, are predominatly urban residents and tend to dominate the economic activities of the society.

29. For example, 98 percent of the Malay students in this sample as compared to 24 percent of the Chinese students reported that they were recipients of a scholarship from the Federal Government. Receiving a government scholarship meant almost automatic admission into the University of Malaya and employment by the government after graduation. The Malaysian government has been practicing various forms of "reverse discrimination" since independence was achieved in 1957 in order to reduce the socio-economic disparity between Malays and Chinese.

30. To those who are familiar with Malaysian history, this will be a well-known phenomenon. Others who wish to read further on this topic should consult other sources such as the following: Gordon P. Means, Malaysian Politics, (New York: New York University Press, 1970); K. J. Ratnam, Communalism and the Political Process in Malaya, (Kuala Lumpar: University of Malaya Press, 1965); and William R. Roff, The Origins of Malay Nationalism, (New Haven: Yale University Press, 1967).

31. For a useful description of the militant political activities of Malay university students, see Josef Silverstein, "Students in Southeast Asian Politics," Pacific Affairs, 49 (Summer 1976), pp. 189-212. To summarize briefly, the Malay students criticize the government for not doing more to assist the Malay community.

32. Eldon L. Wegner, "The Effects of Upward Mobility: A Study of Working Status College Students," p. 266.

33. For example, see Derek L. Phillips, "Social Participation and Happiness," The American Journal of Sociology, 72 (March 1967), pp. 477-488; Norman M. Bradburn and David Caplovitz, Reports on Happiness, (Chicago: Aldine, 1965); and Thomas S. Langner and Stanley T. Michael, Life Stress and Mental Health, (New York: Free Press, 1963).

34. All students are automatically members of the University of Malaya Students' Union which is structurally rather similar to most student governments in U.S. universities. The campus clubs and associations University of Malaya students could join at the time of this study included the following: Athletic Union, Buddhist Society, Catholic Students' Society, Economics Society, Engineering Society, Geographical Society, Historical Society, Malay Language Society, Muslim Society, Science Society, Student Christian Movement, Tamil Language Society, Varsity Christian Fellowship, Debating Union, Literary and Dramatic Association, Music Society, Agricultural Society, Chinese Language Society, and Philosophy Club. See University of Malaya Calendar 1966-1967, (Kuala Lumpur: Public Printers), pp. 356-358.

35. The Cronbach's alpha for these items is .84.

36. While these items include signs and symptoms that might be perceived as being separate phenomena, they have been considered to be related through a common possible cause, stress. They include not only psychological effects but also physiological effects that can be derived from the concept of a "General Adaptation Syndrome," developed by Selye in Hans Selye, The Stress of Life, (New York: McGraw-Hill Book Company, 1956). Manifestations of this syndrome are further described in Stewart Wolf and Helen Goodell (editors), Harold G. Wolff's Stress and Disease, (Springfield, IL: Charles C. Thomas, 1968).

37. N. A. Scotch, "Sociocultural Factors in the Epidemiology of Zulu Hypertension," American Journal of Public Health, 53 (August 1963), pp. 1207-1213 and S. Leonard Syme, et al., "Some Social and Cultural Factors Associated with the Occurrence of Coronary Heart Disease," Journal of Chronic Disease, 17 (March 1964), pp. 277-289.

38. Eldon L. Wegner, "The Effects of Upward Mobility: A Study of Working Status College Students," p. 266. It is worth noting that other studies have reported that males and females in the United States differ in reporting physical and mental symptoms. The general tendency is for females to report more symptoms than males, e.g., Derek L. Phillips and Bernard E. Segal, "Sexual Status and Psychiatric Symptoms," American Sociological Review, 34 (February 1969), pp. 58-72. Lois M. Verbrugge, "Females and Illness: Recent Trends in Sex Differences in the United States," Journal of Health and Social Behavior, 17 (Decmeber 1976), pp. 387-403.

39. In order to verify that the results reported were not attributable to methodological factors, the data were analyzed with varying categorization methods (trichotomization of the dependent variables, including sales and clerical workers with manual workers, etc.) as well as through analysis of variance. Essentially the same results reported were obtained regardless of the method utilized.